REMARKS

The Examiner rejected claims 78-101 under 35 U.S.C. §103(a) as being unpatentable over the Willming patent.

Independent claim 78 is directed to a method of receiving a current frame and processing data in a first frame in response to a current map contained in the received current frame. The current frame comprises a frame sync segment, a plurality of data segments, a current map indicating a location of the data in the first frame, a next map indicating a location of data in a second frame, and a count indicating the number of frames until the next map becomes the current map.

The Examiner asserts that the Mapper and Sync Inserter 34 disclosed in the Willming patent is a current map that indicates the location of data in a first frame. However, the Mapper and Sync Inserter 34 is not a current map and does not indicate the location of data in a frame.

As shown in Figure 4 of the Willming patent, the Mapper and Sync Inserter 34 includes a symbol mapper 49, a multiplexer 62, a RAM 64, and a segment and frame sync source 66. The symbol mapper 49 maps (converts)

output data bits from a convolutional encoder 32b into a sequence of data symbols where each such data symbol is in the constellation (-7, -5, -3, -1, +1, +3, +5 and +7). The multiplexer 62 multiplexes these data symbols from the symbol mapper 49 with segment and frame syncs from the segment and frame sync source 66. The RAM 64 is provided to store the last twelve symbols of the last data segment of a frame so that these twelve symbols can be inserted into the last twelve symbol intervals of the frame sync segment of the next frame.

As can be seen, the Mapper and Sync Inserter 34 does not insert a current map into a first frame. The Mapper and Sync Inserter 34 inserts only data symbols, frame syncs, and segments into a frame. The data symbols do not designate the locations of data in a first frame, the frame syncs do not designate the locations of data in a first frame, and the segment syncs do not designate the locations of data in a first frame.

Moreover, the Mapper and Sync Inserter 34 is not a current map that is inserted into a current frame. The current map is a signal that is inserted into a frame. The Mapper and Sync Inserter 34 is not a signal. Instead, the Mapper and Sync Inserter 34 is hardware

and/or software that converts bits to symbols and adds segment and frame syncs to form a frame.

Not only does the Willming patent not disclose a current map as recited in independent claim 78, the Willming patent does not suggest a current map as recited in independent claim 78.

The Willming patent also does not disclose a next map that indicates the location of data in a second frame. The Examiner asserts that it would have been obvious to add a next map because the Willming patent discloses a current map. However, as discussed above, the Willming patent does not disclose or suggest a current map. Therefore, the Willming patent cannot suggest a next map.

Furthermore, there is no description or suggestion in the Willming patent of a current frame having a count that indicates the number of frames until the next map becomes the current map.

Because the Willming patent does not disclose a current map, a next map, or a count as recited in independent claim 78, independent claim 78 is patentable over the Willming patent.

Independent claim 85 is directed to a method of transmitting a current frame having a frame sync segment

and a plurality of data segments. A current map, a next map, and a count are inserted into the current frame. The current map indicates a location of data in a first frame, the next map indicates a location of data in a second frame, and the count indicates the number of frames until the next map becomes the current map. The current frame is transmitted.

As discussed above, the Willming patent does not disclose or suggest a current map that indicates a location of data in a first frame, the Willming patent does not disclose or suggest a next map that indicates a location of data in a second frame, and the Willming patent does not disclose or suggest a count that indicates the number of frames until the next map becomes the current map.

Because the Willming patent does not disclose a current map, a next map, or a count as recited in independent claim 85, independent claim 85 is patentable over the Willming patent.

Independent claim 89 is directed to a method in which a field is received and data in the current frame is processed in response to a current map contained in the received frame. The frame comprises first and second fields each having a frame sync segment and a plurality

of data segments. The first field contains a current map and count information, and the second field contains a next map and count information. The current map indicates location of data in a current frame, the next map indicates location of data in a future frame, and the count information indicates the number of frames until the next map becomes the current map.

As discussed above, the Willming patent does not disclose or suggest a current map that indicates location of data in a current frame, the Willming patent does not disclose or suggest a next map that indicates location of data in a future frame, and the Willming patent does not disclose or suggest count information that indicates the number of frames until the next map becomes the current map.

Because the Willming patent does not disclose a current map, a next map, or a count as recited in independent claim 89, independent claim 89 is patentable over the Willming patent.

Independent claim 97 is directed to a method of transmitting a frame having first and second fields each having a frame sync segment and a plurality of data segments. A current map and count information are inserted into the first field. The current map indicates

location of data in a current frame. A next map and count information are inserted into the second field. The next map indicates location of data in a future frame, and the count information indicates the number of frames until the next map becomes the current map. The first and second fields of the frame are transmitted.

As discussed above, the Willming patent does not disclose or suggest a current map that indicates location of data in a current frame, the Willming patent does not disclose or suggest a next map that indicates location of data in a future frame, and the Willming patent does not disclose or suggest count information that indicates the number of frames until the next map becomes the current map.

Because the Willming patent does not disclose a current map, a next map, or a count as recited in independent claim 97, independent claim 97 is patentable over the Willming patent.

Because independent claims 78, 85, 89, and 97 are patentable over the Willming patent, dependent claims 79-84, 86-88, 90-96, and 98-101 are likewise patentable over the Willming patent.

CONCLUSION

In view of the above, it is clear that the claims of the present application are patentable over the reference applied by the Examiner. Accordingly, allowance of these claims and issuance of the above captioned patent application are respectfully requested.

Respectfully submitted,

SCHIFF HARDIN LLP

By: _____

Trevor B. Joike
Reg. No. 25,542
Attorneys for Applicants
6600 Sears Tower
233 South Wacker Drive
Chicago, IL 60606
(312) 258-5500

January 26, 2004